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Suaahara Agriculture Framework and Plan



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SUAAHARA

Building Strong & Smart Families



Save the Children



Jhpiego
an office of Johns Hopkins University

WOMEN'S EMPOWERING
REPRODUCTIVE
HEALTH AND HEALTH

Center for
Communication
Programs



Nepal's Technical Assistance Group (NTAG)





Suaahara Agriculture Framework and Plan

Over the past decade, some people have become healthier in Nepal. But many mothers and children still have poor nutrition. 4 out of every 10 children below the age of 5 are stunted (malnourished over a long time period), and 3 out of every 10 are underweight (their weight is low for their age). According to the 2011 Demographic and Health Survey, 1 in 5 women don't have enough energy, and 1 out of 3 women and 5 out of 10 children are anemic. Because Nepali women and children are not healthy, the economy is not as strong as it could be.

There are a number reasons women and children are in poor health. Nutritious foods might not be available. People might not be able to access them. Nutritious foods might be too expensive. And some people might not understand the importance of eating good food.

Recently, Nepali families are producing less food. But there still many people who eat food from their home gardens. Six in ten Nepali households are food insecure for 6 or more months every year. In other words, they are not able to provide enough good foods for themselves. But we can help these individuals grow healthy food at home such as green leafy vegetables and orange vegetables like pumpkins carrots and fruits. Eggs and meat are also very important.

Since 1950, agriculture programs have helped Nepalis grow *more* food. Before 1950, there wasn't enough food in many parts of Nepal. Experts thought helping families grow lots of food was the answer. They were less concerned about the *quality* of the food families were producing. Even recent programs try to help families grow *more* food. These include the Agricultural Perspective Plan (APP). Even though the APP has tried to address food insecurity, "food insecurity" has been interpreted as the total *quantity* of food. If people don't eat good *quality* food, they won't be healthy—no matter how much food they have.

Sometimes, the government thinks that more food is also the solution to food insecurity. The Ministry of Agricultural Development has 3 departments: (MoAD)—the Department of Agriculture (DoA), the Department of Livestock Services (DoLS), and the Department of Food Technology and Quality Control (DFTQC). But only (DFTQC) focuses on the quality of foods Nepalis eat. For example, the DFTQC produces nutritious foods like *sarbottam pitho* (super flour) for children to eat. They also work to produce nutritious foods from local sources, but these foods are still not available.

The Nepali government is now writing two policies to connect food and nutritional security: the Food and Nutrition Security Plan of Action (FAO), and the Agricultural Development Strategy (ADS). The ADS is important because it tries to correct ideas about food and food security that have been used in the past to increase the quantity, and not the quality of the food being produced in Nepal.

The 2010-2011 Living Standards Survey shows that people in Nepal eat enough food. The percent of homes that did not have any food shortages in the last 30 days was 50% in 1996 and 7% in 2011. With the current situation in Nepal, our focus should be on doing things that increase supply, access and

consumption of a healthy, diverse diet. The homestead food production (HFP) program developed by Helen Keller International (HKI) helps families eat diverse, nutritious foods. The HFP program focuses on pregnant and breastfeeding mothers and children under the age of two. Recently, an evaluation of the program showed that the HFP approach is very successful at changing people's behaviors.

We've learned the following about agricultural programs and the health of women and children:

- By helping women compost using farmyard manure and use bio-pesticides, we reduce the amount of work they do as well as costs.
- Nepalis already have home gardens (*karesabari*) so we can help them plant healthier fruits and vegetables and raise small livestock effectively.
- Basic marketing skills can help people buy supplies and sell extra produce.
- Promotion and counseling can help people learn about healthy and unhealthy foods.
- Special efforts (sack gardening, bee keeping, mushroom cultivation, etc.) are needed to help families from disadvantaged groups as well as landless families.
- Social marketing and media should promote local, highly nutritious foods.
- Women's workload can be reduced through clean sources of energy and more efficient stoves.
- Homestead food production should be sensitive to local culture (for example, when choosing animals that will be promoted).
- Private businesses can make homestead food production sustainable through help with irrigation, vaccination of animals, chicks for poultry production and other areas.
- Teaching mothers how to preserve foods can help make sure there is healthy food available throughout the year.
- Helping model farmers and local resource persons (LRP) make homestead food production work over a long period of time.

Suaahara will use the homestead food production model in all VDCs of the most food insecure districts and 10-15 food insecure VDCs from food secure districts of Nepal and will make sure pregnant and breastfeeding mothers and young children have access to nutritious foods.

Goals:

- Increase the production, availability and use of diverse and healthy foods (eggs; meat; dark green leafy vegetables; orange vegetables such as pumpkins and carrots; etc.) for women and children under the age of two, year round.
- Help landless and poor homes access healthy foods.
- Build local capacity to increase production and improve access to diverse and healthy foods.

Strategies:

Suaahara will work at a variety of levels at the same time, including (1) households (2) wards (3) VDCs (4) districts, and (5) Nepal as a whole.

Overall strategy

Objectives	Issues	Strategies
Increase household production, availability, and access to nutritious foods year round for all family members	<ul style="list-style-type: none"> • Low production of diverse foods • Healthy foods not grown throughout the year • Difficult to grow healthy crops year round in the high mountains • Especially in the West, if farmers produce too much, there aren't enough markets for the extra food • Access to improved seeds, improved breeds of poultry, irrigation, pesticides, extension services and markets is limited • Men migrate. This increases women's work • Farming involves lots of risks 	<ol style="list-style-type: none"> 1. Promote homestead food production 2. Create VMFs; use local seeds and inputs if possible; be sensitive to gender; include the marginalized 3. Integrate poultry/animal production with home gardening 4. Coordinate with different government ministries 5. Market foods collectively 6. Preserve foods so that they are available in lean season 7. Help communities with seeds, chicks, seedlings, etc.
Help families eat balanced, micronutrient-rich foods	<ul style="list-style-type: none"> • Diets low in animal source foods and healthy plants • "Minor" crops not planted • Little known about post-harvest processing and food preservation 	<ol style="list-style-type: none"> 1. Nutrition education and behavior change 2. School gardening to raise awareness about nutrition from an early age
Help landless/poor households improve access to good foods	<ul style="list-style-type: none"> • Little or no land for home garden • Little access to diverse and healthy foods. 	<ol style="list-style-type: none"> 1. Promote roof, pot, terrace and sack gardening 2. Emphasize income generation activities such as mushroom cultivation, bee keeping, etc. to meet nutritional needs
Improve the capacity of government and NGO partners	<ul style="list-style-type: none"> • Nutrition may not be a government priority and coordination might not be taking place • Staff may not know a lot about nutrition 	Governance and coordination across the government
Train and develop potential leader farmers as VMFs	<ul style="list-style-type: none"> • HFP program may not reach non-targeted communities • Communities have limited access to improved technology and inputs • Communities have limited access to agriculture and livestock service providers 	<ol style="list-style-type: none"> 1. Provide technical support to seed production, collective marketing, agro-vets, poultry vaccination, coop construction and feed preparation 2. Link communities to agriculture and livestock service providers 3. Coordinate with DDC/VDCs for grants

Ensure sustainability of homestead food production program	<ul style="list-style-type: none"> • Program regularization may be in question after it's phased out. 	<ol style="list-style-type: none"> 1. Register groups with DADO/DLSO 2. Establish resource centers such as community brooding centers, seed production, feed production, etc. 3. Identify and train local resource persons 4. Start collective marketing such as weekly <i>haat</i> bazaars, collection centers, etc. 5. Link with agriculture and livestock service providers
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Suaahara will work in households, wards, VDCs, districts and nationally. Here's what we'll do:

Household

- Use homestead gardens and backyard poultry to help families grow and eat more animal source foods and micronutrient-rich plants. The focus will be on 4 colors: green (green leafy vegetables), orange (sweet potatoes, squash, etc.), brown/maroon (meat) and white (rice, eggs, dairy products such as cheese, etc.).

Ward

- Create village model nutrition gardens and community brooding centers as learning centers and to access seeds, improved chicks, etc.

VDC

- Help the government's agriculture and livestock sub-centers add nutrition sensitive agriculture to VDC planning.
- Help the government introduce GESI into VDC block grants.

District

- Work with the District Livestock Service and District Agriculture Offices to roll out HFP training

Nation

- Fully include nutrition and agriculture in the National Food and Nutrition Security Plan

Specifics:

In year 2, Suaahara will focus on 4 practices that have been shown to reduce malnutrition:

1. Train healthcare providers, pharmacists, families and other individuals to help mothers give an extra meal to pregnant women and two extra meals to those who breastfeed
2. Encourage families to add three things to the baby's diet: 1) animal source food such as eggs and meat 2) greens, and 3) orange-fleshed foods
3. Work with caregivers so that they wash their hands before feeding the baby, and
4. When baby is sick, continue to breastfeed and give extra food. After baby is better, give an extra meal each day for 2 weeks.

A fifth practice that will be emphasized in year 2 is:

5. Help families use floor mats and chicken coops to create physical barriers between children and animals, particularly animal feces.

The importance of separating children from dirt and feces has emerged recently as critical to reducing environmental enteropathy and chronic sickness and may in fact be as important as diet in reducing stunting.

The major social and behavior change strategies Suaahara will use for agriculture in year 2 are:

1. Train 1000 days families to help mothers establish improved homestead gardens
2. Assess feasibility then promote improved, low cost management practices (integrated pest management, waste water collection, organic manure)
3. Support interpersonal communication and media advocacy to reduce women's workloads
4. Help households use improved breeds of chickens and give them the support needed to raise healthy chickens including regular vaccines, nutritious feed mixes and building poultry coops
5. Promote optimal nutrition practices to change behaviors
6. Strengthen the government's ability to design and implement programs at all levels

These are described in detail below.

The major social and behavior change strategies in year 3 include all of the agriculture strategies Suaahara will use in year 2 plus:

1. Select and train Village Model Farmers from among homestead food beneficiaries
2. Train in improved husbandry practices to help VMFs provide technical support to others
3. Promote rooftop gardening, sack gardening, bee keeping, mushroom cultivation, etc. to help the landless grow healthy crops and raise small livestock
4. Promote processing and preservation practices to make available vegetables throughout the year
5. Produce seeds
6. Help groups market crops
7. Initiate and support school gardens

Specifics:

1. Promote greens, orange fleshed vegetables, fruits and other nutritious crops in homestead gardens

HFP helps women and children eat diverse and healthy foods. With HFP, women, children and other disadvantaged groups can have a home-based farm where healthy vegetables, fruits, chickens and other animals are raised. HFP households will get special training as well as seeds, chicks and technical advice.

HFP's first goal is to help women and children eat healthy foods. If families produce more food than they need, they can sell their products to make money. District Development Committees (DDCs) can help us find homes where with disadvantaged groups, pregnant/breastfeeding mothers and children under 2 years old ("target households").

After finding target households, Suaahara will identify good crops that are already being grown locally or that could be produced locally. Suaahara will also help communities use local crops more effectively through better use of bio-pesticides, composting and manure and irrigation.

Even good ideas may make more work for women. If women have to go to lots of meetings and trainings, they will have a heavy workload. Collecting firewood, cleaning the house and fetching water take a lot of time. To help women work less, Suaahara will teach them how to make better compost, improve their sheds and cook with more efficient stoves. Radio programs will encourage men to help with chores around the house.

Because some ways of improved farming are useful only to people who have land, landless families have difficulty growing healthy foods. To address this, Suaahara will help dalits, janajatis, and others through new approaches to farming such as rooftop gardening, sack gardening, bee keeping, mushroom cultivation, etc.

Suaahara will also:

- Help people from disadvantaged groups become village model farmers. We'll identify these groups through social mapping. Suaahara will help train local leaders on how to find these households, and then it will help them work to provide nutritious, healthy foods.
- Support households from disadvantaged groups and poor families. Find incentives at different levels (seeds, cash, etc.) based on what the household needs.
- Try to help women work less by coordinating with other groups that provide things like cleaner, more efficient stoves, clean water, and other helpful supplies that will work in the area. This means that Suaahara will not have to pay for everything that is given to poor households.

2. Promote raising chickens and other small animals

Even though Nepali food usually has protein from plants (daal), there is very little protein from animals. It is important to help pregnant and breastfeeding women and children eat eggs because it is the easiest way to get animal protein. This can be done by promoting "one egg a day for pregnant and breastfeeding mothers and children."

Suaahara will also help families produce more eggs. We can help communities build chicken coops, protect poultry from predators, feed them good food, and vaccinate them from diseases. Suaahara will work with the District Livestock Service Office (DLSO) to make sure there are enough eggs in the community.

Suaahara will start with hatcheries in some districts to make better types of chickens and eggs available. We'll work with the DLSO and private hatcheries. These hatcheries give the owner the chance to make a good income, while also helping community members' access chickens. People at each hatchery will work with FCHVs so that new mothers can get help with their chickens. If the hatcheries work, Suaahara will build as many as ten hatcheries per district.

To help families with their chickens when they get sick, some HFP families will be trained in basic animal medicine. After finishing basic training, community members will pay these people to help vaccinate their animals or provide other medical care.

Locally trained animal caregivers can reduce many but not all the risks that come with raising chickens and other small animals. A community insurance program will help when there are emergencies. This program will be paid for by fees from the members of the HFP group, and the rules for paying people in case of emergencies will be made by community members.

3. Strengthen Homestead Food Production for the Poor and Landless

Helping landless and poor members of local communities is very important to Suaahara, because the landless and poor do not get enough healthy food. To fix this problem, Suaahara will do the following:

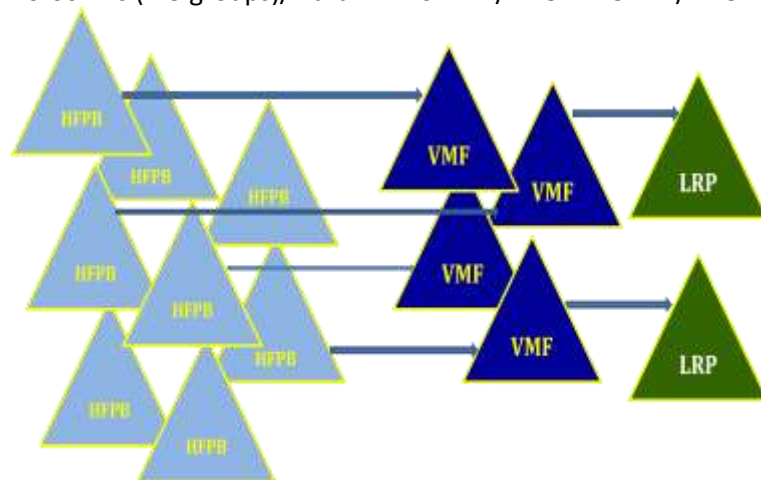
- Identify poor and excluded groups
- Find ways to help landless people. The landless could use community, public, or private land. Suaahara will help local government find land for these people
- Find other ways to help the landless through chickens, mushroom growing, and so on
- Help families grow vegetables that don't take a lot of land. Jute/sack farming, pot gardening, and terrace gardening are just some of the ways we can do this

4. Promote Village Model Farmers

The village model farmer (VMF) approach was developed by Helen Keller International. These types of approaches are called Transfer of Technology programs. They've been criticized because they do not last as long as they could, the community may not be interested in doing something new, and such programs may make things worse if they help just a few families—especially the ones that are already doing well. Research tells us that a better way to help the poor and disadvantaged grow and eat more nutritious foods is through programs that work with local communities to learn together, involve them in the decision making process, and ask them for their ideas and suggestions in order to find out what needs to be done.

The Village Model Farm can serve as a supply centre that helps community members with chicks, seeds and other things farmers need. While the VMF model has been successful, in many parts of the world, VMFs have had some challenges. For example, sometimes few community members visit the VMF and VMFs may not be interested in visiting poor and disadvantaged households. Suaahara will take what we've learned from HKI's AAMA program and revise the VMF model to better help the poor and disadvantaged. We will work with many Homestead Food Production (HFP) beneficiaries and from that pool, identify VMFs, especially from landless and disadvantaged groups. Each VMF will focus on one thing. One will be an expert on chickens, another will be an expert on seed collection and another will be an expert on food preservation.

20-60 hhs (2-3 groups)/ward 4-6 VMF/VDC 2-3 LRP/VDC



HFPB: Homestead Food Production beneficiaries, VMF: Village model farm/farmers, LRP: Local Resource Person.

Selecting wards and VMFs

Suaahara will work in all VDCs and 4-5 selected wards. We will select wards based on disadvantaged group mapping.

The VMFs we select will have the following qualities:

- Community respects the person and knows she is active, committed, and good with people
- Can lead a group and is able to change their behaviors
- Accepted by the poor and the disadvantaged; committed to working with them
- The family gives a written paper saying they will help the VMF with household chores and with the garden
- Interested in learning new ways of gardening and sharing those with others—sack gardening, growing healthy foods year round, storing vegetables and so on
- Knows how to read or has a family member who can help her read and write
- Easy to reach. Able to visit others

Things the Village Model Farmer will do:

- Inspire and motivate HFPs
- Help community members eat healthy food, practice good handwashing techniques, and use their garden to grow healthy vegetables and raise chickens
- Sell chicks, eggs, seedlings, and vegetables to community members
- Set up a resource center, working with the DPHO, DADO, and the WDO
- Monitor and supervise HFPs. Help them grow healthy vegetables and feed women and children animal-sourced foods

In many cases, the VMF and the FCHV will be the same person. This helps women who are VMFs and also FCHVs help families with agriculture *and* health. Also, it reduces travel time and makes it easier for people to come to one person for help.

5. Market as a group

Because HFP helps families grow nutritious foods that they themselves can eat, extra food is only sold when there is more food than the family needs. When this happens, Suaahara will help communities sell their produce together. The VMF will collect extra food and help sell it for income for the community.

More and more, farmers in Nepal use group marketing. Group marketing helps small farmers do better against large, commercial farms. When farmers bring together all their produce, community members can lower the cost of getting produce to the market, purchasing seeds and selling their goods together.

From time to time, local markets such as *haat* bazaars can be used to sell and trade goods. Where markets exist, Suaahara will train on marketing.

6. Give nutrition education and help people change their behaviors

Suaahara staff will provide education and promote behavior change when they meet for HFP or VMF activities, during counseling sessions and group meetings for mothers, fathers and grandmothers, and at other times. We will work with the Department of Food Technology and Quality Control to make a chart that compares the nutritional value and cost of different foods. We will then create a “healthy food identification” card. FCHVs and VMFs can distribute these cards to households.

We will also make radio programs, posters, pamphlets, and TV programs to help families eat affordable, healthy foods. We’ll warn families about the harm of junk food and families will try to improve breastfeeding and feeding young children meat and vegetables. Because most Nepali families have a radio, radio programs will be used as the main way of sharing these behaviors.

7. Start school gardens

Now, more and more children go to school. Because of this, classroom education can help children eat nutritious food. Suaahara will help schools develop a “home garden” with healthy fruits and vegetables. We’ll give schools small grants to develop gardens. Communities can use these grants to make fences, buy seeds, and keep the garden running. We’ll give teachers ideas for games and songs to be shared with children to help them understand why it is important to eat healthy foods. One teacher will work with VMFs so that school and community programs help each other out.

8. Help families process and preserve food

Suaahara works in a lot of mountain districts where it will be hard to grow vegetables and fruits all year round. This makes preserving food very important. We’ll also help communities process foods to keep the food’s nutrients.

9. Train the government, NGOs and other partners

We will train government and non-government partners in Essential Nutrition Actions. In our training, we will give partners skills in counseling, “negotiation,” adult learning theory, supervision, and monitoring. Some government staff receive extra training in the analysis and assessment of policy, advocacy, and program planning. We’ll use the tools and materials that Helen Keller International has used in other programs. We will monitor trainings closely.

Suaahara will coordinate with the Food and Nutritional Co-ordination Committee (FNCC) at the national, district, and local levels to work with other groups. Suaahara will also work with the Ministry of Agricultural Development. Suaahara will make sure that its activities, messages, and plans build on what the government is already doing.